



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Prospective, population based studies of cavernous malformations are needed

Citation for published version:

Al-Shahi, R & Warlow, CP 1999, 'Prospective, population based studies of cavernous malformations are needed', *Journal of Neurology, Neurosurgery & Psychiatry*, vol. 67, no. 6, pp. 833.
<<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1736695/>>

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Journal of Neurology, Neurosurgery & Psychiatry

Publisher Rights Statement:

available via europepmc open access link

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Prospective, population based studies of cavernous malformations are needed

In their welcome systematic review of supratentorial cavernous malformations and epilepsy, Moran *et al*¹ illustrate the pitfalls of regarding the prognosis of a disease in selected case series as representative of its natural history.² Studies of cavernous malformation prognosis have usually lacked clear inception cohorts with respect to mode of presentation and treatment. Referral filter bias has so often restricted ascertainment by tertiary referral centres, and further selection bias has made the prognosis seem worse than it really is, as demonstrated by the authors' own series of 33 patients in which temporal lobe lesion location and intractable seizures predominated. Conversely, by leaving community mortality unaccounted for, the prognosis can seem better than it actually is. Completeness of follow up has been variable and not always prospective. Furthermore, authors have varied in their choice of outcome, in particular their definition of haemorrhage (clinical or radiological), choice of period at risk (from birth, time of diagnosis, or start of observation) and calculation of outcomes for each patient or for each lesion. Any analyses of such heterogeneous case series should be ruthlessly systematic, but even so it is necessary to be wary about drawing firm conclusions from them.³

The only existing population based study of cavernous malformations,⁴ albeit with a denominator of merely 50 000, was retrospective. The study spanned fundamental developments in the non-invasive diagnosis of cavernous malformations during the 1980s with magnetic resonance imaging,⁵ which led to increasing detection rates with time.

There is, therefore, clearly a need for a large, population based, prospective, contemporary epidemiological survey of cavernous malformations to establish their frequency and prognosis. With a broad collaborative network, including the three other neuroscience centres in Scotland, the Scottish Intracranial Vascular Malformation Study (SIVMS) has been set up (<http://www.dcn.ed.ac.uk/ivm/>) to do just this for all types of intracranial vascular malformation (IVM). Using multiple, overlapping sources of case ascertainment we are building an inception cohort of all incident cases of any type of IVM diagnosed after 1 January 1999 in the population of Scotland (5.1 million). With prolonged follow up of this cohort we hope to settle some of the uncertainties highlighted by Moran *et al*.¹ Moreover we agree that, with such poor data available, a randomised controlled trial of surgical versus conservative treatment for cavernous malformations is overdue.

RUSTAM AL-SHAHI
CHARLES P WARLOW

Department of Clinical Neurosciences, Western General Hospital, Crewe Road, Edinburgh EH4 2XU, UK

Correspondence to: Dr Rustam Al-Shahi, MRC Clinical Training Fellow, Department of Clinical Neurosciences, Bramwell Dott Building, Western General Hospital, Crewe Road, Edinburgh EH4 2XU email ras@skull.dcn.ed.ac.uk

- 1 Moran NF, Fish DR, Kitchen N, *et al*. Supratentorial cavernous haemangiomas and epilepsy: a review of the literature and case series. *J Neurol Neurosurg Psychiatry* 1999;66:561-8.
- 2 Sackett DL, Haynes RB, Guyatt GH, *et al*. *Clinical epidemiology. A basic science for clinical medicine*. 2nd ed. Boston: Little, Brown, 1991:173-85.

- 3 Egger M, Schneider M, Davey Smith G. Spurious precision? Meta-analysis of observational studies. *BMJ* 1998;316:140-4.
- 4 Brown RD Jr, Wiebers DO, Torner JC, *et al*. Incidence and prevalence of intracranial vascular malformations in Olmsted County, Minnesota, 1965-1992. *Neurology* 1996;46:949-52.
- 5 Rigamonti D, Drayer BP, Johnson PC, *et al*. The MRI appearance of cavernous malformations (angiomas). *J Neurosurg* 1987;67:518-24.

Neurological stamp: Adam Politzer (1835-1920)

Recently, I found an interesting manuscript in your journal about Adam Politzer under the section on neurological stamps. I was mildly disappointed by the presence of some inaccuracies concerning the biography of Adam Politzer, and write to you to correct these imprecisions.

Adam Politzer published in 1878 the first volume of his textbook of otology under the original German title *Lehrbuch der Ohrenheilkunde für praktische Ärzte und Studierende*. The second volume was published in 1882 to complete his work.¹ Since the second edition, this textbook of otology was printed in one volume.

The finding that ossicles vibrate to sound stimuli was not made by Politzer but by Hermann von Helmholtz with his resonance theory published in 1863 completed by the mechanism of ossicles and tympanic membrane in 1868.² Politzer was one of his students in 1861 in Heidelberg.

Adam Politzer invented, notably, a revolutionary method to make the eustachian tube permeable in 1863,³ a method which made him famous and carries his name. He also developed an audiometer in 1877⁴ to measure hearing, replacing the watch, which was used until this date.

In 1864 Politzer founded with Anton von Tröltzsch and Hermann Schwartz the first German and international journal of otology under the original title *Archiv für Ohrenheilkunde*.⁵ In 1879 *The American Journal of Otology*⁶ was founded and edited by Clarence J Blake and was printed for only 4 years at this time.

In addition to more than 100 publications in medical journals, and besides his textbook of otology, Adam Politzer published three other books, all translated into English. As well as one book about anatomical and histological dissection of the human ear⁷ and one about the history of otology,⁸ Politzer published an atlas of the tympanic membrane in 1865,⁹ completed and reprinted in 1896.¹⁰

Politzer was certainly the greatest otologist of the 19th century and probably one of the greatest of all time. His influence during 50 years of otology has never been equalled.

ALBERT MUDRY

ENT Department, University Hospital, Av. de la Gare 6 CH-1003 Lausanne, Switzerland
email: amudry@worldcom.ch

- 1 Politzer A. *Lehrbuch der Ohrenheilkunde für praktische Ärzte und Studierende*. Stuttgart: Enke, 1878 Band I, 1882 Band II.
- 2 von Helmholtz H. Mechanik der Gehörknöchelchen und des Trommelfells. *Monatsschr Ohrenheil* 1868;2:159-64.
- 3 Politzer A. Ueber ein neues Heilverfahren gegen Schwerhörigkeit, infolge von Unwegsamkeit der Eustachischen Ohrtrompete. *Wien Med Wochenschr* 1863;6:83-90,102-4.
- 4 Politzer A. Ueber einen einheitlichen Hörmesser. *Archiv für Ohrenheilkunde* 1877;12:104-9.
- 5 Poliker A, van Troeltsch A, Schwartz H. *Archiv für Ohrenheilkunde*. Würzburg: Stahel. Erster Band, 1864.
- 6 Blake CJ. *The American Journal of Otology*. Vol I. New York: Wood. 1879.

- 7 Politzer A. *Die anatomische und histologische Zergliederung des menschlichen Gehörorgans*. Stuttgart: Enke, 1889.
- 8 Politzer A. *Geschichte der Ohrenheilkunde*. Stuttgart: Enke, 1907 Band I, 1913 Band II.
- 9 Politzer A. *Die Beleuchtungsbilder des Trommelfells im gesunden und kranken Zustande*. Wien: Braunmüller, 1865.
- 10 Politzer A. *Atlas der Beleuchtungsbilder des Trommelfells im gesunden und kranken Zustande*. Wien: Braunmüller, 1896.

BOOK REVIEWS

Mononeuropathies: Examination, Diagnosis and Treatment by A STAAL, J VAN GIJN, and F SPAANS (pp 243, £35.00). Published by W B Saunders, London, 1999.

The authors say that they wrote this book from a frustration at having to look at several different sources to solve a single clinical problem.

The introductory chapters contain sound clinical advice on a general approach to patients with mononeuropathy. Then each nerve is dealt with in turn using the same format: anatomy; history; examination—including the method of examination of the relevant muscles and the area of sensory loss—electrophysiological findings; differential diagnosis; causes, often tabulated; and finally treatment. The line drawings of the anatomy are clear, highlighting sites of compression. The line drawings of power testing are less satisfactory. The movement to be tested is well illustrated but the site of the muscle being tested (and hopefully observed) is not shown and for some muscles lies outside the illustration. This is followed by some chapters discussing causes of peripheral nerve injury other than focal lesions, including metabolic and physical factors and tumours. The description of the clinical syndromes is clear and succinct and well referenced throughout. The advice on treatment is sensible with a strong emphasis towards conservative management with clear statements as to when more rapid intervention is needed.

The text is interspersed with illustrative cases which appear in boxes. I thought this worked well, although was surprised to find eight doctors (including a Professor of Neurology with a partial musculocutaneous nerve lesion, and a Dean of the Faculty of Medicine with neuralgic amyotrophy), among the 40 or so cases.

While for mononeuropathies the book manages to act as a single point of reference it does not do this for some similar clinical problems whose presentations may be similar. It only briefly touches on radiculopathies as they appear in the differential diagnosis of mononeuropathies and skirts round some contentious issues such as the thoracic outlet syndrome. The anatomy of the brachial plexus (something I always have to look up) is not reproduced.

Overall I think the authors have succeeded in their objectives and there is indeed justification for this book. The book is moderately priced at less than half the price of the combined costs two of the books they aim to replace.

I would suggest that most neurology units should get a copy. I would urge you to persuade your orthopaedic colleagues to get one too.

GN FULLER